



Healthcare professionals' attitudes across different hospital departments regarding alcohol-related presentations

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Title: Healthcare professionals' attitudes across different hospital departments regarding alcohol-related presentations

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ABSTRACT

Introduction and Aims: Attitudes to individuals presenting with alcohol-related issues are important in developing therapeutic relationships and applying alcohol-related interventions. This study explores staff attitudes to these individuals across a range of roles and departments.

Design and Methods: Data was gathered from 204 staff in the Southern Health and Social Care Trust in Northern Ireland. Regression models were used to predict attitudes as measured by the Short Alcohol and Alcohol Problems Perception Questionnaire (SAAPPQ).

Results: Two hundred and four people participated in the study. The sample comprised doctors, nurses, allied health professionals and other staff who had face-to-face contact with patients. Staff worked in Accident and Emergency (A&E), Medical, Surgical, Addiction or Psychiatry departments. Staff working in Addictions and Psychiatry departments had significantly higher levels of role adequacy compared to those in A&E. Staff in Addictions also demonstrated higher levels of role legitimacy, motivation, and role satisfaction than those in A&E. Doctors had higher role adequacy and role legitimacy than nursing staff.

Discussion and Conclusions: There are critical differences in staff attitudes to patients presenting with alcohol-related issues in a range of hospital settings; training and working in a specialist setting has significant positive influence on staff attitudes. This suggests further training and support would positively enhance the attitudes of staff in a variety of professional roles and across a range of hospital settings in the management of patients presenting with alcohol-related difficulties.

Key Words: Alcohol Drinking; Alcoholism; Attitude of Health Professionals; Medical Staff; Nursing Staff

INTRODUCTION

In the United Kingdom (UK) alcohol accounts for 10% of disability adjusted life years (DALYs) and costs the National Health Service around £3bn (£3.7bn; \$4.8bn) each year [1]. Part of this cost is due to acute alcohol-related accident and emergency/emergency department (A&E/ED) attendances or hospital admissions. There were around 1.2 million alcohol-related hospital admissions in 2010/11 in the UK [2].

Of the 1.6 million people who are alcohol dependent in the UK, approximately 6% per year receive treatment [3]. The positive attitude of health care professionals (HCPs) to those with alcohol-related problems is imperative to encourage individuals into treatment and achieve goals of harm reduction or abstinence [4]. HCPs are key in working toward reducing stigma faced by people who use alcohol [5] and in utilising Screening and Brief Intervention (SBI) to reduce the harmful effects from alcohol

use [6]. The success of these interventions may well be at risk as HCPs' regard for substance users is less than that for patients with other mental and physical health problems [7].

The capacity of a HCP to deal with alcohol-related issues depends on the attitudes, willingness, and ability of staff to approach and engage clients [8,9]. Barriers to a good therapeutic relationship include; lack of training, negative attitudes towards patients with alcohol-related issues, staff having low confidence in their own abilities, and pressures on both time and resources [9]. Indeed, negative staff attitudes might be a barrier for individuals to seek treatment for alcohol-related problems. HCPs in hospitals, especially A&E, are crucial in recognising and identifying problematic alcohol use. Since many people are ashamed or avoid seeking treatment, emergency presentations provide a good opportunity to motivate people to seek treatment even when alcohol use may not be the 'primary' reason for attending [6]. Researchers have found that the therapeutic relationship between HCPs and patients with alcohol-related issues is improved with perceived role adequacy and legitimacy, the availability of support, and confidence in the HCPs' ability, following training, to intervene [8,10]. The absence of such qualities has been shown to be a barrier to raising alcohol issues with the patient [11,12].

Some nurses have reported low confidence in asking about alcohol use, and may ask about it less often than doctors [6]. A study involving both doctors and nurses in EDs highlighted that lack of training in alcohol screening or brief interventions was related to lower levels of confidence in making onward referral to specialist treatment services [6]. However, whilst confidence may be lower, nurses placed more value on the importance of identifying alcohol-related problems than doctors, and held fewer negative beliefs about the efficacy of treatment, particularly in A&E [6]. Other research suggested that being a doctor was a statistically significant predictor of having a sense of role adequacy and legitimacy in managing patients with alcohol-related issues [12,13]. Thus training may play a key role in improving nurses' confidence, and may highlight to doctors the importance of discussing alcohol with patients. The value of formal training in improving role adequacy in general practitioners (GPs), A&E doctors and nurses, psychiatric nurses, psychiatric auxiliary staff, psychologists, mental health social workers (SWs) and other allied health professionals (AHPs) is supported by a number of studies [9,10,14,15]. Formal training has also been illustrated to increase motivation in GPs [9] and role legitimacy in GPs, A&E doctors and nurses, mental health SWs and other AHPs [10]. These professionals also reported greater job satisfaction following formal training [10,15]. Finally task-specific self-esteem was shown to be greater following formal training in GPs, A&E nurses and doctors, and AHPs [9,10].

Attitudes may also vary depending on medical specialism; each department has different roles and responsibilities. Pinikahana *et al.* [16] found attitudes in an Australian dual diagnosis team were generally positive. Length of experience related positively to improved staff attitudes, given most of their surveyed staff had more than 10 years experience working in mental health. However, in one study, up to one third of A&E staff felt there may be nothing they could do to help patients with alcohol-related problems [17]. The burden on resources in an acute service, including insufficient staff time, may explain this finding [6].

In Northern Ireland (NI) 73% of the population drank alcohol in the past year [18]. This represents a higher level of abstention than figures in England and Wales (17% in 2007) [19]. It was assumed that those who consume alcohol may have more positive attitudes towards those who also consume alcohol, including those who present with alcohol-related issues, or who have an underlying alcohol issue but present for other reasons.

The evaluation of beliefs and values is important as this affects both the care provided [20] and the implementation of systematic alcohol strategies designed to help individuals with alcohol-related issues [15]. Earlier studies have tended to concentrate on staff in only one specialty, e.g., mental health [15, 21], A&E [6,13], or general practice [9,12,22], or with only one staff group such as nurses [16,23]. The main objective of this study is to investigate the differences in attitudes towards alcohol-related presentations between HCPs working in different roles in different hospital departments. More positive attitudes are expected in those working in addiction units [16] or in those who have been formally trained in dealing with alcohol-related issues [15]. The study also controlled for the effect of other related factors such as length of time working in a healthcare role, training experience or desire for training, and other personal characteristics such as whether an individual drinks alcohol or not, and their sex.

METHODS

Participants and data

Data was gathered from an opportunity sample comprising 204 staff members from a range of departments at three sites (Craigavon Area Hospital, St Luke's Hospital and Daisy Hill Hospital) in the Southern Health and Social Care Trust (NI) in 2012.

Staff were invited to take part through poster advertisements in communal staff areas where paper questionnaires were placed. Completed questionnaires were entered into a sealed box and collected two weeks after advertisement began. Study inclusion criteria were: a) face-to-face patient contact in a therapeutic role in the relevant departments on the study sites and b) being aged 18 years or over. The study received ethical approval from the Office for Research Ethics Committees Northern Ireland prior to data collection.

Alcohol and other measures

Attitudes to patients with alcohol-related issues were measured using the Short Alcohol and Alcohol Problems Perception Questionnaire (SAAPPQ; [24-25]) a validated 10-item questionnaire measuring the attitudes of professionals towards the provision of care to those with alcohol use disorders. The 10 items were scored from 0 (strongly disagree) to 6 (strongly agree). Five pairs of items are each summed to give measures of the following: role adequacy (items 1&2), task-specific self-esteem (3&4), motivation (5&6), role legitimacy (7&8) and work satisfaction (9&10). Role adequacy measures how the HCP feels about their knowledge and skill in working with these patients, task specific self-esteem is the HCPs' self-esteem in this specific task, motivation measures the HCPs' willingness to work with these patients, role legitimacy measures the extent to which the HCP feels

they have the right to work with these patients, and work satisfaction measures the HCPs' expectations of work satisfaction with these patients [10]. Scores on each pair range from 0-12 and a total score on the scale would range from 0-60. The higher the SAAPPQ score is, the more positive the attitude. A number of additional questions were asked. Participants were asked which department they worked in (whether medical/surgical, addiction, psychiatry or A&E department). Their professional role was recorded (doctor, nurse, AHP or other), and number of years experience working with patients in a face-to-face role was noted, grouped in 10 year bands. Staff were also asked whether they took alcohol themselves (yes=1; no=0), if they had received formal training in managing individuals who present with alcohol-related issues (yes=1; no=0), or whether they are interested in receiving such training (yes=1; no=0). Participant sex and age (grouped 20 or less, 21-30, 31-40, 41-50, 51-60, and 61 and over years) were also recorded.

Statistical analysis

Analyses were performed in SPSS version 20. Descriptive statistics were run to characterise the sample. Five multiple regressions were performed to predict scores on each of the five domains of the SAAPPQ (role adequacy, task specific self-efficacy, motivation, legitimacy, and work satisfaction). The following predictors were used in each of the five models; sex, current drinking status, and training (either training received or whether they were interested in training). For the purposes of regression the following variables were dummy coded (reference category in brackets), department (A&E), staff role (nurses), staff experience (more than 20 years). Missing data were listwise deleted in all analyses (statistical analyses not using the full n=204 are indicated).

RESULTS

Of the 204 respondents, the majority (n=162; 79.4%) were current alcohol users (see table 1). Only 32% had formal training in the management of individuals presenting with alcohol-related issues, and of these, most of the training was relatively recent, with 65.2% in the past 5 years. Most indicated an interest in formal training in alcohol-related issues (n=180; 88.2%) but only 28% were aware of the availability of such training. There were 173 responses from females (84.8%). The sample comprised of 18 doctors (8.8%), 145 nurses (71.1%), 25 AHPs (12.3%) and 16 others (7.8%). There were 34 staff from A&E (16.7%), 64 from medical/surgical wards (31.4%), 15 from addictions (7.4%) and 91 from psychiatry (44.6%). Length of experience varied; most (n=97; 47.6%) had less than 10 years experience, 38 participants had 10-20 years experience (18.6%) and 69 participants had more than 20 years experience (33.8%).

The overall mean SAAPPQ score was 37.31. As scores range from 0-60, this represents a slightly more positive attitude overall. For each of the five domains of role adequacy, task-specific self-esteem, motivation, role legitimacy and work satisfaction the maximum score was 12 (range between 0 and 12). Work satisfaction had the lowest overall mean score, at around 6, and represented a mid point in the range, perhaps neither positive nor negative in attitude. The most positive attitudes were expressed in the task-specific self esteem and role legitimacy domains with mean scores of 8.36 and 8.01 respectively (see table 1).

Table 1 approximately here

A set of multiple linear regression models were conducted to determine whether sex, place of work, professional role, length of experience in healthcare, current drinking status, having formal training, and being interested in formal training were predictors of the five subdomains of the SAAPPQ. Each of these will be discussed in turn (see table 2). Preliminary analyses were conducted to ensure there was no violation of the assumptions of normality, linearity, multicollinearity and homoscedacity before proceeding with the analysis.

Table 2 approximately here

The results of the multiple linear regression suggested the predictors accounted for 37.2% of the variability in role adequacy ($F(11,190)=10.24$; $p<.001$). Of these, the strongest predictor was being in an addiction department ($\beta=.34$) compared to A&E. Other significant associations included being in the psychiatry department (compared to A&E), being a doctor or not being an AHP, having formal training in addictions, and being uninterested in receiving formal training in addictions.

Around 18.4% of the variability in task specific self-efficacy was explained by the model and the overall model was not significant ($F(11,189)=3.88$; $p<.001$). Only one of the predictors was significant such that working in an addiction department compared to A&E was associated with higher task specific self-efficacy.

The predictors explained 24.2% of the variability in motivation ($F(11,190)=5.50$; $p<.001$). The strongest predictor of motivation was being a staff member in an addictions department (compared to A&E). AHPs or other professionals were significantly more likely to have a higher motivation than nursing staff ($\beta=.14$). Formal training also played a role, with those with formal addictions training associated with higher motivation compared to those without formal addiction training.

Three of the predictors significantly predicted scores on role legitimacy, overall 24.6% of the variability was explained in the dependent variable ($F(11,190)=5.62$; $p<.001$). Those working in addiction departments compared to A&E had higher role legitimacy; so too did doctors compared to nurses. Experience appeared to play a role; those with less than 20 years experience were significantly less likely to have high role legitimacy compared to those with longer experience.

Satisfaction in working with those with alcohol issues was significantly associated with being in an addiction department (compared to A&E). In addition, having either an interest in formal addiction training or having completed formal addiction training was associated with higher satisfaction. Overall 29.7% of the variability in satisfaction was explained by the predictors ($F(11,190)=7.28$; $p<.001$).

Finally, whether or not the responders took alcohol themselves was not statistically significant.

DISCUSSION

This study assessed the views of 204 individuals from a variety of departments who had a range of roles including doctors, nurses, AHPs and others. Overall, the attitudes to individuals with alcohol-related presentations was around 37, approximately seven higher than the median of the scoring range, so suggesting a slightly more positive view of individuals who present. The SAAPPQ results for each component in this study ranged from 6.06-8.01. These are similar results to other UK studies [26]. Findings from Sweden, Australia and New Zealand had slightly lower SAAPPQ scores than in the domains here, indicating a less positive attitude [12, 27, 28]. The findings may tentatively suggest that staff in NI had more positive attitudes, but are limited in their comparisons by the different HCP groups covered in each study. Replication with comparable samples across countries could better advance what is known about international differences in attitudes.

Department

Departmental differences in attitudes were found; few studies to date have explored differences in working location. Van Boekel *et al.* [29] highlighted the importance of the work environment in empowering professionals to work with substance users. Staff surveyed who were working in Addiction or Psychiatry departments reported higher levels of role adequacy compared to those working in A&E. In addition, staff working in addictions also reported increased role legitimacy, motivation, and role satisfaction. Cartwright [8] found that staff who specialise in working with substance dependent clients had more positive therapeutic attitudes because they have greater access to experience, support and training which enables them to make confident, patient-focussed decisions. Furthermore, staff in addiction departments may be more likely to have longer term contact with their patients and so are more likely to witness progress in treatment over time, in contrast A&E staff may be less likely to see the impact of their interventions.

A&E staff surveyed by Indig *et al.* [6] believed that 35% of those presenting with alcohol-related issues had a co-morbid mental health issue. The complexities around treating those with comorbidity might also explain lower role adequacy scores of A&E staff compared to staff in other departments. Deans and Soar [30] note difficulties in managing patients with a dual diagnosis may result in frustration, resentment and powerlessness. Barriers to treatment identified by A&E staff included patients lacking motivation, intoxicated states, and insufficient time, resources and skills in the management of individuals presenting with alcohol-related issues [6]. This may account for lower role legitimacy in A&E staff compared to addictions staff. Indeed, only 50% of doctors and 35% of nurses in one study felt that it was part of their clinical responsibility to screen for alcohol problems in the ED [6].

Staff role

There were also key differences defined by staff role. Doctors had higher scores on role adequacy and legitimacy than nurses. A recent Royal College of Psychiatrists report [31] noted doctors across all medical specialties, and not just psychiatry, need to be adept at identifying problematic use of alcohol in order to be able to deliver effective treatment and provide brief advice to prevent or reduce future harm. Indig *et al.* [6] found similar differences between the professions. Nurses

appeared less confident when dealing with alcohol-related attendances than medics, with nurses more reluctant to consult with patients regarding their alcohol problems (53% nursing, 35% medical) and more likely to express a need for training to respond to such patients (78% nursing, 53% medical) [13]. Initiatives empowering nurses to deliver SBI and other alcohol policies may not be sufficiently reducing this role adequacy and legitimacy gap. Nurses typically spend more time in direct patient contact than physicians [15] so empowering them to provide SBI may be important in the implementation of lower alcohol consumption strategies, and reducing overall alcohol-related harm. Whilst the AHP group contains an assortment of different roles, e.g., SWs, occupational therapists, or auxiliary nurses, cumulatively they reported decreased role adequacy, lower task self-efficacy but had increased motivation compared to nurses. The need for training in relation to empowering AHPs in reducing alcohol-related harm is also of importance.

Training

The results demonstrated that formal training in substance misuse results in higher levels of motivation and role adequacy. This is supported by others; Geirsson *et al.* [12] and Vadlamudi *et al.* [14] both found nurses had more positive therapeutic attitudes after training. This was mirrored in other studies of a wider range of staff; Nehlin *et al.* [15] showed that both medical and non-medical psychiatry staff had higher levels of role adequacy after only three hours of training. Those who were either interested in training or who had completed training also reported higher satisfaction. This finding is echoed by others who have run brief educational training programs; Nehlin *et al.* [15] also found increased satisfaction following a short training program in nurses, psychiatric aides, psychologists and SWs.

Most staff felt they needed or were interested in additional training in managing alcohol-related issues [13,21,32]. This is particularly key in high-risk groups (e.g. the elderly, pregnant women and adolescents); a lack of knowledge or competencies around the needs of these or other individuals can negatively affect working with these client groups [20].

Other barriers

A need for training is important, but it is only one of the issues faced by those endeavouring to implement SBI in the workplace along with lack of time, fear of antagonising patients, matching the treatment to the healthcare setting (e.g. primary care), and lack of faith in the effectiveness of interventions on those dependent on alcohol [9]. AHPs were likely to be more motivated than nurses. This may be explained by the varied resources available to staff working in different roles [6]. However the study by Nehlin *et al.* [15] found non-medical staff had lower levels of motivation and this did not improve with training; some staff reported that they felt alcohol was not a matter for their concern. There is strong evidence to show that people benefit from brief advice provided by HCPs who are not alcohol specialists [33].

Staff alcohol consumption

This study did not find any significant difference in SAAPPQ score between those who take alcohol themselves and those who do not. There have been conflicting findings as to whether personal

drinking habits affect attitudes. Geirsson's study found that there was a significant difference, with GPs who drank more alcohol scoring higher on role adequacy [12]. Anderson found no correlation between respondents drinking habits and their attitudes [34]. Whilst this study controlled for alcohol use more generally, future research may wish to explore alcohol use using more specific alcohol consumption measures, particularly given HCPs may also experience problems with alcohol or other substances [35].

Limitations

The main limitation of this study is that it was an opportunity sample and the self-selection of respondents may have produced a bias, as one would expect that those who participated were more motivated to discuss issues around alcohol use and work with those with alcohol-related presentations. There was also a lower response rate from doctors than expected (only 18 of 204 completed questionnaires). In the UK there are more registered nurses than doctors [36,37]. Low response rates can be an issue, particularly when involving HCPs working in a busy environment. It is not clear if the responses of those who did not participate would have affected the overall attitudes and beliefs. In this study there were more responses from females than males; again the breakdown of staff may play a role; there are more male doctors than female doctors [36] and more female than male nurses [37] in the UK. Future research may wish to target male staff in hospitals; whilst there may not be any sex differences in attitudes, the preponderance of females in this and similar studies [14,16,23,38] limits empirical testing of this assertion.

Conclusion

The main findings of this study indicate that training and working in a specialist setting has significant positive influence on staff attitudes. There is little doubt that the provision of specific training to all staff would empower them to screen patients for alcohol-related issues and equip them with the necessary skills and expertise to provide these patients either with brief interventional advice or onward referral.

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Table 1: Descriptive statistics of participant characteristics and their attitudes to those with alcohol-related issues in three hospital sites in Northern Ireland.

Variable		N (%)	Mean (SD)
Sex	Male	31 (15.2%)	
	Female	173 (84.8%)	
Attitudes	Total Score		37.31 (8.2)
	Role adequacy		7.70 (2.6)
	Task-specific self-esteem		8.36 (2.4)
	Motivation		7.19 (2.3)
	Role legitimacy		8.01 (2.4)
	Work satisfaction		6.06 (2.2)
Department	Emergency	34 (16.7%)	
	Medical or Surgical	64 (31.4%)	
	Addiction	15 (7.4%)	
	Psychiatry	91 (44.6%)	
Role	Nurse	145 (71.1%)	
	Doctor	18 (8.8%)	
	Allied Health professional and other	41 (20.1%)	
Experience	20 or more years	69 (33.8%)	
	10 up to 20 years	38 (18.6%)	
	Less than 10 years	97 (47.6%)	
Alcohol use	Consumes alcohol currently	162 (79.4%)	
	Not a current alcohol consumer	42 (20.6%)	
Training	Had formal training in the management of individuals with alcohol-related issues	65 (32.0%)	
	Has not had formal training	138 (68.0%)	
Interest in training	Interested in formal training	180 (88.2%)	
	Not interested in formal training	24 (11.8%)	

Table 2: Results of the regression analyses to predict each of the five domain scores on Short Alcohol and Alcohol Problems Perception Questionnaire

		Unstandardised b	Standard Error	Standardised Beta	T	p
<u>Role adequacy^a</u>						
	Intercept	7.46	0.69			
Sex (Reference 'Female')	Male	0.69	0.47	0.09	1.47	0.14
Department (Reference 'A&E')	Medical or Surgical	0.04	0.47	0.01	0.09	0.92
	Addiction	3.38	0.71	0.34	4.74	0.00**
	Psychiatry	1.20	0.46	0.23	2.60	0.01**
Role (Reference 'Nurse')	Doctor	1.38	0.60	0.15	2.31	0.02*
	Allied Health professional/other	-1.17	0.40	-0.18	-2.89	0.00**
Experience (Reference 'more than 20 years')	10-20 years	-0.10	0.45	-0.02	-0.23	0.82
	Less than 10 years	0.05	0.38	0.01	0.14	0.89
Current drinking (Reference 'no')	Do you drink alcohol currently	-0.03	0.39	0.00	-0.07	0.95
Training (Reference 'no formal training')	Had formal training in addictions	1.25	0.37	0.22	3.32	0.00**
Training interest (Reference 'not interested')	Being interested in formal training	-1.04	0.49	-0.13	-2.13	0.03*
<u>Task specific Self Efficacy^b</u>						
	Intercept	8.10	0.71			
Sex (Reference 'Female')	Male	0.50	0.48	0.08	1.02	0.31
Department (Reference 'A&E')	Medical or Surgical	-0.29	0.49	-0.06	-0.59	0.56
	Addiction	2.68	0.73	0.30	3.66	0.00**
	Psychiatry	0.29	0.47	0.06	0.61	0.54
Role (Reference 'Nurse')	Doctor	0.11	0.61	0.01	0.19	0.85
	Allied Health professional/other	-0.81	0.42	-0.14	-1.96	0.05
Experience (Reference 'more than 20 years')	10-20 years	-0.34	0.46	-0.06	-0.73	0.67
	Less than 10 years	0.17	0.39	0.04	0.43	0.47
Current drinking (Reference 'no')	Do you drink alcohol currently	0.21	0.40	0.04	0.52	0.60
Training (Reference 'no formal training')	Had formal training in addictions	0.55	0.39	0.11	1.42	0.16
Training interest (Reference 'not interested')	Being interested in formal training	-0.26	0.50	-0.04	-0.52	0.61
<u>Motivation^c</u>						
	Intercept	5.35	0.67			
Sex (Reference 'Female')	Male	-0.13	0.46	-0.02	-0.28	0.78
Department (Reference 'A&E')	Medical or Surgical	-0.06	0.46	-0.01	-0.13	0.89
	Addiction	3.50	0.69	0.40	5.06	0.00**

	Psychiatry	0.37	0.45	0.08	0.82	0.41
Role (Reference 'Nurse')	Doctor	0.79	0.58	0.10	1.38	0.17
	Allied Health professional/other	0.82	0.39	0.14	2.08	0.04*
Experience (Reference 'more than 20 years')	10-20 years	0.60	0.43	0.10	1.38	0.17
	Less than 10 years	0.38	0.37	0.08	1.04	0.30
Current drinking (Reference 'no')	Do you drink alcohol currently	0.05	0.38	0.01	0.14	0.89
Training (Reference 'no formal training')	Had formal training in addictions	1.07	0.36	0.22	2.95	0.00**
Training interest (Reference 'not interested')	Being interested in formal training	0.64	0.47	0.09	1.35	0.18
Legitimacy^d						
	Intercept	7.53	0.68			
Sex (Reference 'Female')	Male	0.53	0.47	0.08	1.14	0.25
Department (Reference 'A&E')	Medical or Surgical	-0.28	0.47	-0.05	-0.60	0.55
	Addiction	2.48	0.70	0.27	3.52	0.00**
	Psychiatry	0.83	0.46	0.17	1.83	0.07
Role (Reference 'Nurse')	Doctor	1.31	0.59	0.16	2.22	0.03
	Allied Health professional/other	-0.42	0.40	-0.07	-1.06	0.29
Experience (Reference 'more than 20 years')	10-20 years	-0.95	0.44	-0.16	-2.14	0.03
	Less than 10 years	-1.03	0.38	-0.22	-2.74	0.01**
Current drinking (Reference 'no')	Do you drink alcohol currently	0.24	0.39	0.04	0.61	0.54
Training (Reference 'no formal training')	Had formal training in addictions	0.15	0.37	0.03	0.41	0.68
Training interest (Reference 'not interested')	Being interested in formal training	0.38	0.48	0.05	0.79	0.43
Satisfaction^e						
	Intercept	3.45	0.60			
Sex (Reference 'Female')	Male	0.01	0.41	0.00	0.04	0.97
Department (Reference 'A&E')	Medical or Surgical	0.48	0.41	0.10	1.16	0.25
	Addiction	4.17	0.62	0.50	6.71	0.00**
	Psychiatry	0.57	0.40	0.13	1.41	0.16
Role (Reference 'Nurse')	Doctor	0.41	0.52	0.05	0.80	0.43
	Allied Health professional/other	0.20	0.35	0.04	0.56	0.58
Experience (Reference 'more than 20 years')	10-20 years	0.60	0.39	0.11	1.55	0.12
	Less than 10 years	0.45	0.33	0.10	1.36	0.18
Current drinking (Reference 'no')	Do you drink alcohol currently	0.23	0.34	0.04	0.66	0.51
Training (Reference 'no formal training')	Had formal training in addictions	0.86	0.33	0.19	2.64	0.01**
Training interest (Reference 'not interested')	Being interested in formal training	1.18	0.43	0.18	2.77	0.01**

Significant predictors in bold * at 0.05 level ** at 0.01 level

^a Adjusted $R^2=0.34$; Analysed $n=202$ ^b Adjusted $R^2=0.14$; Analysed $n=201$ ^c Adjusted $R^2=0.20$; Analysed $n=202$ ^d Adjusted $R^2=0.25$; Analysed $n=202$ ^e Adjusted $R^2=0.30$; Analysed $n=202$